

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
10/056,701	01/25/2002	H. Thomas Hight III	270801-1011	3146	
7590 10/06/2004			EXAMINER		
Smith, Gambrell & Russell, LLP			CHORBAJI, MONZER R		
1850 M. Street , N.W. Suite 800		•	ART UNIT	ART UNIT PAPER NUMBER	
Washington, DC 20036			1744		

DATE MAILED: 10/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

		<i></i>				
	Application No.	Applicant(s)				
	10/056,701	HIGHT, H. THOMAS				
Office Action Summary	Examiner	Art Unit				
	MONZER R CHORBAJI	1744				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a rep If NO period for reply is specified above, the maximum statutory period Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailir earned patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a reply be timely within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
 1) Responsive to communication(s) filed on 25 J 2a) This action is FINAL. 2b) This 3) Since this application is in condition for allowed closed in accordance with the practice under 	s action is non-final. ance except for formal matters, pro					
·	za punto quajno, 1000 olo:,	,				
Disposition of Claims						
Claim(s) 1-26 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. Claim(s) is/are allowed. Claim(s) 1-6,8-15 and 17-26 is/are rejected. Claim(s) 7 and 16 is/are objected to. Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9)☐ The specification is objected to by the Examin 10)☒ The drawing(s) filed on 25 January 2002 is/are Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11)☐ The oath or declaration is objected to by the E	e: a) accepted or b) objected or b)	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority document application from the International Bureat * See the attached detailed Office action for a list	nts have been received. Its have been received in Applicationity documents have been received in Application (PCT Rule 17.2(a)).	on No ed in this National Stage				
Attachment(s)						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal F 6) Other:					

Art Unit: 1744

DETAILED ACTION

This general office action is in response to the application filing date of 01/25/2002 Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 12 recites the limitation "said fume housing" in numbered line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
 - 1. Determining the scope and contents of the prior art.
 - 2. Ascertaining the differences between the prior art and the claims at issue.
 - 3. Resolving the level of ordinary skill in the pertinent art.
 - 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 4. Claims 1-6 and 8-12 and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin et al (U.S.P.N. 6,203,756) in view of Easton (GB 2,244,919).

With respect to claims 1 and 11, the ('756) reference teaches an exhaust system (figure 1D, 32, 36 and 38) for removing inherent fumes from a liquid (col.13, lines 20-22)

Art Unit: 1744

endoscope disinfecting apparatus (col.3, lines 27-30 and col.13, lines 12-14) including the following: an exhaust pump (figure 1D, 38), an exhaust hose connected to the vacuum pump (figure 1D unlabeled hose), the exhaust system is connected to the endoscope disinfecting apparatus (figure 1D, 2 both the disinfecting apparatus 2 and the exhaust system are in fluid connection with each other through 34), a fume hood (figure 1D, 66) to provide a vapor containment space over the endoscope disinfecting apparatus (figure 1D, unlabeled space above 2 but below 66) and the exhaust pump is communicatively coupled to the fume hood (figure 1D, 66 is connected to 38 through 32). The meaning of the term "fume hood" is considered by the examiner to be a ventilated laboratory enclosure for disposing of fumes, which is equivalent to the structure 66 in figure 1D. The ('756) reference fails to explicitly teach the use of an exhaust fan placed within a housing, however; the ('919) reference, which is in the art of disinfecting endoscopes using liquid solutions, teaches the use of exhaust fans (37) placed within a housing (figure 2, unlabeled housing containing the three exhaust fans 37). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the exhaust system of the ('756) reference by substituting one exhaust means for another as shown in the ('919) reference in order to draw air into the inlet so that the release of disinfectant vapors into the atmosphere is minimized (abstract, lines 3-7).

With respect to claims 2-4, 6, 8, 12 and 14-15, the ('756) reference teaches the following: a soaking basin with a lid (figure 4, 28a and the unlabeled lid) and that is inherently capable of containing fumes, a vacuum pump is in fluid connection with the

Art Unit: 1744

soaking basin to remove inherent vapors within the apparatus (figure 4, 44), a vacuum pump removes fumes from vapor space (figure 1D, 38), a suction hose having two ends (figure 4, unlabeled suction hose, which connects vacuum pump 44 with the soaking basin 2), plurality of suction hoses and a plurality of endoscope disinfecting apparati (figure 5A, figure 6 and figure 9), fume housing (figure 4, unlabeled lid) that includes an access door for insertion and removal of endoscopes and plurality of suction hoses being adapted and configured for attachment to one of plurality of fume hoods (figures 4, figure 5A, figure 6 and figure 9).

With respect to claims 5 and 9-10, the ('919) reference teaches that the lid (3) is connected to the fan housing (25) through studs (figure 3, 32 and page 6, lines 1-5) and the fans must intrinsically include motors.

5. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lin et al (U.S.P.N. 6,203,756) in view of Easton (GB 2,244,919) and further in view of Eakes (U.S.P.N. 4,125,062).

With respect to claim 13, the ('756) reference and the ('919) reference fail to teach mounting fan housing on fume hood, however; the ('062) reference, which is in the art of exhausting fumes, mounts a fan housing (16) on fume hood (12). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the exhaust system of the ('756) reference by placing the exhaust means on top of the fume hood as taught by the ('062) reference in order to draw the exhaust gases from the work area to the atmosphere (col.3, lines 21-24).

Art Unit: 1744

6. Claims 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin et al (U.S.P.N. 6,203,756) in view of Easton (GB 2,244,919) and further in view of Mariotti (U.S.P.N. 5,882,589).

With respect to claims 17-20, the ('756) reference and the ('919) reference fail to discloses specific sections for each part of an endoscope and also fail to disclose a support cylinder around which the insertion tube is coiled. With respect to claim 17, the ('589) reference, which is in the art of disinfecting endoscopes, teaches that the entire endoscope is disinfected (col.10, lines 62-67). Further, the ('589) reference discloses the following: a disinfecting basin (26 which contains connection 50), an endoscope body section (56 in basin 30. The examiner considers the endoscope body that intrinsically includes eye piece section is equivalent to the endoscope part disclosed in col.6, lines 57-62) is connected to the disinfecting basin (both basins share common wall shown in figure 3, 34), an insertion tube section (24) connected to the endoscope body section (both basins share unlabeled common wall shown in figure 3) and the disinfecting basin is a well (26) connected to a side of the endoscope body section (56) through common wall (34). The term "section" is considered by the examiner to be equivalent to component parts assembled together (see the submitted definition of the term section). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the endoscope disinfecting apparatus of the ('756) reference to include specific cleaning section parts for each part of the endoscope as shown in the ('589) reference so that any confusion during connections is prevented by marking such connections (col.9, lines 65-66).

Art Unit: 1744

With respect to claims 18-20, the ('589) reference shows that insertion tube section (24) is coiled around support cylinder (figure 3, 22) and the insertion tube section is coiled almost one turn (24 in figure 3 and col.3, lines 55-59).

7. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lin et al (U.S.P.N. 6,203,756) in view of Easton (GB 2,244,919) and further in view of Mariotti (U.S.P.N. 5,882,589).

With respect to claim 21, the ('756) reference teaches an exhaust system (figure 1D, 32, 36 and 38) for removing inherent fumes from a liquid (col.13, lines 20-22) endoscope disinfecting apparatus (col.3, lines 27-30 and col.13, lines 12-14) including the following: an exhaust pump (figure 1D, 38), an exhaust hose connected to the vacuum pump (figure 1D unlabeled hose), the exhaust system is connected to the endoscope disinfecting apparatus (figure 1D, 2 both the disinfecting apparatus 2 and the exhaust system are in fluid connection with each other through 34), a fume hood (figure 1D, 66) to provide a vapor containment space over the endoscope disinfecting apparatus (figure 1D, unlabeled space above 2 but below 66) and the exhaust pump is communicatively coupled to the fume hood (figure 1D, 66 is connected to 38 through 32). The meaning of the term "fume hood" is considered by the examiner to be a ventilated laboratory enclosure for disposing of fumes, which is equivalent to the structure 66 in figure 1D. The ('756) reference fails to explicitly teach the following: the use of an exhaust fan placed within a housing, a support cylinder and an insertion tube section coiled around the support cylinder. The ('919) reference, which is in the art of disinfecting endoscopes using liquid solutions, teaches the use of exhaust fans (37)

Art Unit: 1744

placed within a housing (figure 2, unlabeled housing containing the three exhaust fans 37), but fails to teach a support cylinder and an insertion tube section coiled around the support cylinder. The ('589) reference shows that insertion tube section (24) is coiled around support cylinder (figure 3, 22). As a result, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the endoscope disinfecting apparatus of the ('756) reference to include a coiled section with a support cylinder as shown in the ('589) reference in order to comply with the morphology of the instruments received therein, so as not to cause deformation of the insertion tubes or light guides (col.9, lines 56-58).

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 9. Claims 22-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Mariotti (U.S.P.N. 5,882,589).

With respect to claim 22, the ('589) reference teaches that the entire endoscope is disinfected (col.10, lines 62-67). Further, the ('589) reference discloses the following: a disinfecting basin (26 which contains connection 50), an endoscope body section (56 in basin 30. The examiner considers the endoscope body that inherently includes eye piece section is equivalent to the endoscope part disclosed in col.6, lines 57-62) is connected to the disinfecting basin (both basins share common wall shown in figure 3,

Art Unit: 1744

34), an insertion tube section (24) connected to the endoscope body section (both basins share unlabeled common wall shown in figure 3) and the disinfecting basin is a well (26) connected to a side of the endoscope body section (56) through common wall (34). The term "section" is considered by the examiner to be equivalent to component parts assembled together (see the submitted definition of the term section). Also, the ('589) reference shows that insertion tube section (24) is coiled.

With respect to claim 23, the ('589) reference shows that the insertion tube section (24) is coiled around support cylinder (figure 3, 22).

10. Claims 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mariotti (U.S.P.N. 5,882,589).

The teachings of the ('589) reference have previously been set forth with respect to claims 22-23. With respect to claims 24-25, the ('589) reference fails to disclose disinfecting plurality of insertion tubes, however; it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the insertion tube section of the ('589) reference by increasing its dimensions in order to disinfect more insertion tubes per batch.

11. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mariotti (U.S.P.N. 5,882,589) in view of Hillebrenner et al (U.S.P.N. 5,534,221).

The teachings of the ('589) reference have previously been set forth with respect to claims 22-23. With respect to claim 26, the ('589) reference fails to disclose the use of support struts between adjacent coils. The ('221) reference teaches the use of struts (figure 18, 242 and 246, also, figure 20, 244). Thus, it would have been obvious to one

Art Unit: 1744

having ordinary skill in the art at the time the invention was made to modify the ('589) reference by including struts as shown in the ('221) reference in order to hold the endoscope tubes to the tray in fixed relation with respect to each other so that the sterilizing agent can make maximum contact with the hoses (col.10, lines 60-66).

Double Patenting

- 12. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).
- **13.** A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer <u>cannot</u> overcome a double patenting rejection based upon 35 U.S.C. 101.
- **14.** Claim 22 is rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1 and 15 of prior U.S. Patent No. 6,361,751. This is a double patenting rejection.

The limitations of claim 22 of application number 10/056,701 are disclosed in Claims 1 and 15 of U.S. Patent No. 6,361,751 as follows: Claim 1 teaches an endoscope disinfection apparatus including a disinfecting basin that disinfects an air/water and light tube of the endoscope; an endoscope body section connected to the disinfecting basin that disinfects a body and eye piece of the endoscope; and an insertion tube section connected to the endoscope body section that disinfects an insertion tube of the endoscope. Claim 15 teaches that insertion tube is curved.

Art Unit: 1744

15. Claim 22 is rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 20 of prior U.S. Patent No. 6,361,751. This is a double patenting rejection.

The limitations of claim 22 of application number 10/056,701 are disclosed in Claim 20 of U.S. Patent No. 6,361,751 as follows: Claim 20 teaches an endoscope disinfection apparatus including a disinfecting basin that disinfects an air/water and light tube of the endoscope; an endoscope body section connected to the disinfecting basin that disinfects a body and eye piece of the endoscope; and an insertion tube section connected to the endoscope body section that disinfects an insertion tube of the endoscope such that the insertion tube section is coiled.

- 16. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).
- 17. A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).
- **18.** Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Art Unit: 1744

19. Claim 22 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 19 of U.S. Patent No. 6,361,751 in view of Takeuchi (U.S.P.N. 4,288,882).

The limitations of claim 22 of application number 10/056,701 are disclosed in Claim 19 of U.S. Patent No. 6,361,751 as follows: Claim 19 teaches an endoscope disinfection apparatus including a disinfecting basin that disinfects an air/water and light tube of the endoscope; an endoscope body section connected to the disinfecting basin that disinfects a body and eye piece of the endoscope; and an insertion tube section connected to the endoscope body section that disinfects an insertion tube of the endoscope. However, claim 19, fails to teach a coiled insertion tube. The ('882) reference teaches a coiled insertion tube (figure 2, 15). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus claim 19 of the U.S. Patent No. 6,361,751 to include a coiled insertion tube section as shown by the ('882) reference in order to accommodate for its inherent coiled shape.

20. Claims 23-25 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 19 of U.S. Patent No. 6,361,751 in view of Takeuchi (U.S.P.N. 4,288,882) and further in view of Mariotti (U.S.P.N. 5,882,589).

With respect to claims 23-25, claim 19 of U.S. Patent No. 6,361,751 and the ('882) reference fail to disclose an insertion tube coiled around a support cylinder and disinfecting plurality of insertion tubes. With respect to claim 23, the ('589) reference

Art Unit: 1744

shows that the insertion tube section (24) is coiled around support cylinder (figure 3, 22). With regard to claims 24-25, the ('589) reference fails to disclose disinfecting plurality of insertion tubes, however; it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus claim 19 of the U.S. Patent No. 6,361,751 by increasing the dimensions of insertion tube section in order to disinfect more insertion tubes per batch.

21. Claim 26 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 19 of U.S. Patent No. 6,361,751 in view of Takeuchi (U.S.P.N. 4,288,882) and further in view of Hillebrenner et al (U.S.P.N. 5,534,221).

With respect to claim 26, claim 19 of U.S. Patent No. 6,361,751 and the ('882) reference fail to disclose the use of support struts between adjacent coils. The ('221) reference teaches the use of struts (figure 18, 242 and 246, also, figure 20, 244). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus claim 19 of the U.S. Patent No. 6,361,751 including struts as shown in the ('221) reference in order to hold the endoscope tubes to the tray in fixed relation with respect to each other so that the sterilizing agent can make maximum contact with the hoses (col.10, lines 60-66).

Allowable Subject Matter

22. Claims 7 and 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 1744

Conclusion

- 23. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The ('637) reference, the ('280) reference, the ('996) reference and the ('590) reference all teach similar concepts in disinfecting endoscopes.
- 24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MONZER R CHORBAJI whose telephone number is (571) 272-1271. The examiner can normally be reached on M-F 6:30-3:00.
- 25. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, ROBERT J WARDEN can be reached on (571) 272-1281. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.
- 26. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Monzer R. Chorbaji MRC
Patent Examiner
AU 1744
09/27/2004

Theme Mill